of the hypophysis or ovaries for amenorrhea, although when and if ovulation accompanies the bleeding in all cases is doubtful, yet pregnancy may occur promptly in women who have been sterile.

It has been suggested that the small amount of roentgen radiation given in these cases is stimulating. There is no experimental basis for the conclusion. On the other hand, all clinical and laboratory investigations have shown that irradiation is primarily inhibitory, even to the point of complete destruction of cellular function and life. The mechanism of the ovarian or pituitary hormones and their interrelationship are not thoroughly understood. Since all evidence is against the theory that irradiation causes stimulation, it seems most likely that treatment suppresses some hyperactivity, the predominance of which results in hypoactivity of other functions, thus bringing about a return to normal balance.

In the metrorrhagic type of functional menstrual disturbances, the intervals between bleeding are shortened, or they are profuse and prolonged even to the point of continuous bleeding. This condition is thought usually to be due to hyposecretion of only corpus luteal hormones of the ovary; however, there may be an accompanying reduction in urinary excretion of estrogens. Usually metrorrhagia responds to correction of metabolic disturbances, especially of calcium and the administration of pregnancy urine extracts, particularly to young women. However, if bleeding persists, it may be advisable in young women to give very small doses of lightly filtered radium which has a direct effect upon the endometrium without damage to the ovaries. In older women it may be necessary to give sufficient roentgenotherapy to stop menstruation completely.

An interesting metabolic disorder associated with dysfunction of the anterior lobe of the pituitary causes water retention and premenstrual edema. The mechanism has not been satisfactorily explained. Patients with this condition have been normal in weight, but begin to gain suddenly and rapidly for no explainable reason. The weight gain may take place preceding menstruation and be accompanied by severe migraine with evidences of edema of the retina and discs, causing visual disturbances. Proper metabolic measurements will show that it cannot possibly be due to accumulation of fat.

The usual treatment is to begin to restrict the diet very rigidly and to reduce water intake to a minimum. Often remarkable improvement is brought about by intramuscular injections of pregnancy urine extracts and emmenin. But in some cases these measures are unavailing and irradiation then is indicated. For older women approaching the menopause, the quickest and easiest method to correct the difficulty is to stop menstruation by roentgen treatment of the ovaries. Especially grateful are those women who suffer severely from migraine. In young women, irradiation of the hypophysis is beneficial; in fact, often the results are startling. We have seen patients who did not lose weight by diets as low as 500 calories and reduced water intake and who did not respond to other measures, but lost from ten to twenty pounds within a week or two following moderate irradiation of the pituitary.

It becomes apparent that the best results that are and can be obtained from roentgenotherapy require the closest possible coöperation between physicians and surgeons in all medical specialties and radiologists. The application of roentgenotherapy requires imagination and scientific inquisitiveness, tempered by knowledge of the physical and biological effects of radiation, and of physiology and pathology.

Cleveland Clinic.

CAN CLINICS HELP PRACTITIONERS OF MEDICINE?

By W. E. CARTER, M. D.
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THE answer to this question depends on three considerations: first, the desire of those who operate clinics to help the practicing physician; second, their willingness to do the necessary work to accomplish this desire—for the wish alone is not enough; and third, the eagerness of the practitioner to receive such help.

THE PROBLEM

In the past, executives and staffs of clinics have had, as their prime and often their only interest, the care of the indigent or near-indigent patient. The latter's problems alone have absorbed their major interests and the funds of the institution. The physician who took care of the patient previously and referred him to the clinic has been dismissed, perhaps with a polite "Thank you." Any interest he had in the patient was ignored. In the practice of medicine, however, a physician often retains his interest in a patient, even though that patient receives attention in a clinic. This interest may be, and often is, a scientific one. Perhaps the disorder is one of particular concern to the physician, who may deeply regret the loss of opportunity to complete the diagnosis and to watch the course. He feels that his chance of following through is likely to be ended, once the patient has become one of the hundreds of clinic "cases." He recognizes that the close and highly desirable doctor-patient relationship is jeopardized. Can we wonder, therefore, that there is often an ill-concealed hostility between the doctors of a community and its clinics?

THE SOLUTION

What can be done to overcome this attitude? The answer is simple enough. Let clinics be helpful to doctors instead of indifferent or even antagonistic. They can be helpful only by actually seeing the doctor's problems and meeting them fairly. Then, if the desire to be of service to him is present, the rest will be comparatively easy.

IS APPLICANT ENTITLED TO CARE?

The first means of breaking down disaffection is by asking the physician whether or not, in his judg-

ment, the applicant for entry to the clinic is really entitled to its care? If the applicant lives near by, the inquiry can be made by telephone, especially if the community is comparatively small. The University of California Hospital, however, employs the following letter form:

Dear Doctor:

——— has applied to this Out-Patient Department for medical attention.

From the data given us, it appears that this patient is not able to pay a fee for medical service, and is, therefore, entitled to be admitted to our Out-Patient Department. We should be glad to have your opinion and any information you care to give us, and shall regard both as confidential.

Should you desire to be informed of our findings and treatment, we shall be glad to send them to you upon request. Please refer to Out-Patient Department number in correspondence regarding this patient.

Our Social Service Department gets its best leads from the answers to these letters. They are sent to the doctor whom the patient or his family may have consulted during the preceding ten years. The patient may deny having seen a doctor, but a child under ten, whose birth occasioned the service of a physician, may give a clew and allow a history taker to determine the doctor's name. It is most gratifying that a practitioner seldom objects to the admission of a patient who is really eligible for clinic care.

REPORT IS SENT TO THE PHYSICIAN

The next step is to offer to the physician a report of the results of the clinical investigations made. This is frequently of great advantage to him, because clinic patients may call their doctors when illness overtakes them in their homes. Furthermore, the scientific interest mentioned above lies herein. The medical adviser is glad to know the results of the clinical survey that is frequently more comprehensive than that which he himself could make because of the patient's financial limitations. In addition, he knows that the patient may some time become ineligible for further clinic care; some other member of the family may get employment, or the patient himself may get a job after he has recovered from his illness. He may then return to the private practitioner who, with such a résumé, is in much better position to carry on.

THE PATIENT'S FINANCIAL PROBLEM

So much for the medical side of the picture. How about the financial problems of the patient, a consideration of which is so important in building up a practice, and in gaining the kindly regard of the community? Let us answer this by citing a hypothetical case: The physician is called to the telephone by a garage owner in whose shop he has his automobile repaired, and whose family he has taken care of for years. He is informed that one of the garage employees, a man who has a wife and a dependent mother, is sick. He is asked to examine the employee. The doctor knows that this man earns little and that he cannot pay for medical advice; nevertheless, he asks that the employee be sent down to his office. A few hours later he realizes that the patient has something more than a casual disorder; he has pain in his right upper quadrant, with attacks of nausea; in addition, he has obvious nasal polyps; and he has had blood in the stools, which the doctor cannot account for by digital or anoscopic examination. Being a cautious man, he accepts the pointedness of the Hibernianism, "blood in the stools always means cancer until you prove otherwise." So what is he to do? He can prescribe palliatively and observe the patient; but that is poor medical practice and, consequently, repellent to him. To send the man to a roentgenologist, a rhinologist, and a proctologist is beyond the patient's means; he might be able to pay five, ten, or, in extraordinary instances, fifteen dollars for diagnostic procedures, but more than that is quite beyond him. The local county hospital might admit him if a definite diagnosis could be presented. Perhaps the treatment might not require hospitalization and ambulatory care would suffice.

Here is a chance for the well-organized clinic to be helpful. Just one instance of coöperation in such a case as this may overcome the doctor's objections to clinics and their methods.

UNIVERSITY HOSPITAL'S APPROACH TO PHYSICIANS IN PRIVATE PRACTICE

About a decade ago the authorities of the University of California Medical School and the University Hospital recognized the validity of the practitioner's right to all the aids that such an institution can give him. They still feel that the School's full duty to the young medical man is not discharged when it graduates him; and, furthermore, they believe that this institution owes a service to all other practitioners in the state, no matter whence they come. In the furtherance of this policy they issued an invitation to all practitioners in the state to this effect:

Send us your problems among patients whose economic status is such that you cannot obtain those aids you require for diagnosis and treatment. Your other patients you will, of course, continue to send to private consultants and laboratories. We recognize that you operate a miniature clinic in your own office; that you see many patients who can never pay you for your services, but whom you expect to care for as a matter of interest or policy. It is with these that we desire to assist you. We shall make a complete investigation. The clinic rate for laboratory or x-ray procedures is, as you know, small. At the conclusion of our investigation we shall send the patient back to you and give you a résumé of our study and suggestions for treatment.

What has been the result of this invitation? The first month we had fewer than forty referred patients; the number is now, per month, about four hundred. If further proof is required, the director has in his desk a folder which contains letters of appreciation from referring doctors—a folder that is already a good volume.

HOW THE SYSTEM WORKS

Now let us consider briefly how the system works in this particular institution. The applicant arrives at the information desk of the Social Service Department and presents the letter from his medical adviser. If he comes from out of town, he has usually been informed by his doctor that he must be prepared to remain a few days in the neighborhood of the clinic. The Social Service Department

tells him where he can get a room for as little as 75 cents a day and that there is a cafeteria near by. His social history is taken. (Incidentally, on rare occasions, this investigation reveals financial resources concealed from the referring doctor, whereupon the physician is notified). The patient is then given a numbered clinic card for identification. All the data, including the doctor's letter and reports (the latter are sometimes numerous) are enclosed in the usual type of folder—8 by 11 inches in size—and this is the patient's file. He is then sent to the proper clinic. Most often the General Medical Clinic is selected. Let us follow the routine of a patient going to this clinic.

PART TAKEN BY THE FOURTH-YEAR STUDENT

On his arrival in that department he is taken in charge by a fourth-year student, who has had a year and a half's training in examining patients, and has been carefully coached in the best manner of conduct when dealing with referred patients. When I say "taken in charge," I mean just that. The student thenceforth is the key-man. Do patients object? They do not. It has been many months since I have had a patient complain that he had been assigned to a mere medical student who would probably want to "experiment" on him. On the contrary, following the first surprised look as the patient sees the youthful face, he comes to like the situation. Within a few minutes the student has become both friend and guide, and I have had patients return, accompanied by other applicants, asking to see certain "doctors" whom I recognize to be fourth-year students.

Students are assigned only one or, at most, two patients a day. With the carry-over of patients not yet discharged, together with other work incident to the fourth year, they are busy from ten in the forenoon to five or six in the afternoon. They take a complete history, make a physical examination, do the ordinary laboratory procedures themselves, and prepare the case for presentation to the medical consultant to whom they are assigned. (There is one consultant to every four or five students.) The student guides the patient through all the special consultations that may be required; I have seen terrified patients actually being led by their hands to various specialty clinics. In this manner, long before the undergraduate has completed his fourth year, he gets the feel of that human rôle which all good doctors play.

When the study is concluded, and the consultant has outlined treatment (if it appears that the referring doctor so wishes it), what then? The student gives the patient instructions as to his care until he is seen by his family doctor, and bids him good-bye, often with evidences from each of a newly awakened friendship. The patient is also instructed to call on his family doctor within a few days, and is told that a letter will be sent promptly to the doctor, giving all the details of the patient's course in the clinic. A very important part of the student's professional training enters at this point. He must epitomize the case in a comprehensive report, written out by long hand, to the referring doctor. This epitome, in substance, is revised and approved by the student's consultant, and is thereupon taken to the director's office, where it is further edited and transcribed, signed, and promptly posted. The student's name is put on the file copy of the letter, and the folder is returned to him for final review. In this manner the case is crystallized in his mind, a deep impression is made; he has been taught something of the art of getting along smoothly with his confrères, without which he can never be happy in medicine.

In recent years, many of our graduates have referred their problems to us and sometimes they bring their patients in personally; they tell us how valuable their training was in this respect and how great an aid the referred service is to them now in their practices. This is the answer to the query: Can clinics help practitioners of medicine?

Medical Center.

THE LURE OF MEDICAL HISTORY†

JOHN TOWNSEND—THE PERIPATETIC PIONEER

By FRANCES TOMLINSON GARDNER
San Francisco

PART II*

CHOSEN BY LOT

BY lot, three men were chosen to stay at the lake and guard the goods of the others through the winter. They were Joseph Foster, Allen Montgomery, and little Moses Schallenberger. All the others, successfully surmounting the immediate barrier, staggered on until they reached the head of the Yuba River. This was all they could do. Animals and men alike gave out. At the head of the Yuba were left the women and children and old man Martin, all in the care of one able-bodied man named Miller, who had a family of his own among them. They had wagons for protection and the oxen for food. They were not too depleted to arrange for themselves, and did not fare as badly through the winter as might have been expected.

The eight remaining men, all young, pushed on through the snowy forest to Johnson's Ranch and Sacramento. Here Townsend was reunited with his wife, who had already arrived with the party of the Tahoe, St. Clair Rancho route. Leaving instructions at Sacramento for a relief party to succor those remaining on the Yuba, these gay young men set off with Captain Sutter to wage war against the Mexican governor, Micheltorena.

The three men left at the lake went hurriedly about the business of making a livable winter camp. Working at top speed they managed, in two days, to construct a cabin, 12 by 14 feet in size and almost 8 feet high. With the cunning of experience they roofed it well with pine brush and rawhide, and

† A Twenty-Five Years Ago column, made up of excerpts from the official journal of the California Medical Association of twenty-five years ago, is printed in each issue of CALIFORNIA AND WESTERN MEDICINE. The column is one of the regular features of the Miscellany department, and its page number will be found on the front cover.

* For Part I, see September issue, CALIFORNIA AND WESTERN MEDICINE, page 171.